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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,951	03/12/2004	John W. Haim	I-2-0459.1US	8032

24374 7590 05/12/2008

VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA, SUITE 1600
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER	
FOTAKIS, ARISTOCRATIS	
ART UNIT	PAPER NUMBER
2611	

MAIL DATE	DELIVERY MODE
05/12/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/799,951	HAIM ET AL.	
	Examiner	Art Unit	
	ARISTOCRATIS FOTAKIS	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/18/2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3 – 4, 6 - 9, 12 – 19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3 – 4, 6 - 9, 12 – 19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The affidavit filed on April 18, 2008 under 37 CFR 1.131 is sufficient to overcome the Webster et al (US 6,748, 2000) reference.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 3 – 4, 6 - 7, 12 – 15 and 18 – 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Giancola et al (2006/0014507).

Re claims 3 and 12, Giancola teaches of a receiver comprising: a gain control loop (Fig.4) configured to process samples of a data signal received with respect to a selected timeslot (Paragraph 0019) of a time frame (Paragraph 0017) including; a gain control (#17, Figs.3 and 4) for applying a gain factor (*gain setting number*) to samples of

the data signal (Paragraphs 0023 - 0025); a saturation detection circuit (#34, Fig.3) configured to process samples from the gain control in selected groups to determine a number of samples within a group which exceed a saturation criteria (Paragraphs 0019 - 0021, Fig.3); a gain control adjustment circuit (Fig.4) operatively associated with said gain control and said saturation detection circuit to adjust the gain factor (*gain setting number*) applied by the gain control based in part on group saturation numbers (#input #36, Fig.4) determined by the saturation detection circuit while processing the data signal received with respect to the selected timeslot of time frame (Paragraphs 0023 – 0025, Figs.3 and 4) such that: an initial gain factor (*gain setting number*) is applied to a first group of samples of the data signal received in the selected timeslot for which a first group saturation number is determined by the saturation detection circuit (Paragraph 0025), a gain factor adjusted based in part on the first group saturation number is applied to a second group of samples of the data signal received in the selected timeslot for which a second group saturation number is determined by the saturation detection circuit (Paragraph 0024, Lines 14 -17 and Paragraph 0025), and a gain factor (gain setting number, Fig.1, *different from the one above*) adjusted based in part on the second group saturation number is applied to a third group of samples of the data signal received in the selected timeslot (AGC loop, Fig. 4, *The AGC loop continuously tracks and adjusts the gain for ever group of samples*).

Re claims 4 and 13, Giancola teaches of the gain control loop configured to process a plurality of samples of the data signal received in the selected timeslot

between processing said first group of samples and said second group of samples and to process a plurality of samples of the data signal received in the selected timeslot between processing said second group of samples and said third group of samples (see rejections of 1 and 12).

Re claim 14, Giancola teaches of the gain control adjustment circuit configured to make gain factor adjustments using a power correction factor (#36, Fig.4).

Re claims 6 and 15, Giancola teaches of the gain control adjustment circuit is configured to make gain factor adjustments using a power correction factor (#36, Fig.4) that is based in part upon a group saturation number (Paragraph 0019) determined by the saturation detection circuit (#34, Fig. 3).

Re claims 18 and 19, Giancola teaches of a wireless transmit receive unit (WTRU) comprising the receiver (Paragraph 0002, *It is inherent that a CDMA radio receiver would be part of a transceiver to establish bi-directional communication with the handset or basestation*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giancola in view of Zamat (US 6,314,278).

Giancola teaches all the limitations of claims 3 and 12 as well as the gain control adjustment circuit is configured to make gain factor adjustments using a power correction factor that is based in part upon a group saturation number determined by the saturation detection circuit (see claim 7 and 15). Giancola does not specifically teach of the use of a lookup table to receive the determined number and to output the power correction factor.

Zamat teaches of adjusting gain in a receiver using received signal sample values (title of invention and Abstract). the gain control adjustment circuit is configured to make gain factor adjustments using a power correction factor that is based in part upon a group saturation number determined by the saturation detection circuit by using a lookup table (table of Fig.4) to receive the determined number and to output the power correction factor (Fig.4, Col 5, Lines 15 – 45).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used a look-up table to apply a power correction factor according to the number of samples that have been saturated.

Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giancola in view of Mutojo et al. (US 20040151264).

Giancola teaches all the limitations of claims 3 and 12 except of the use of an erase circuit.

Montojo teaches of a receiver operating to AGC a multi-carrier signal through a corresponding number of inner loops and an outer loop AGC processes (Abstract). Montojo teaches of threshold comparison where there are a couple of options to be used. The first option is to set a maximum front-end Attenuation level so that a minimum number of bits are allocated to represent the signal/noise input at the ADC input. The second option is not setting any constraint on the maximum front-end attenuation. By not setting any constraint on the maximum front-end attenuation, the signal of interest may be removed from the ADC produced signal. Effectively, the first option preserves a minimum number of bits allocated to the signal of interest at the expense of not closing the loop to the Active State set point and hence allowing some additional saturation. If the unwanted signal power is so large that severely saturates the ADC for the maximum attenuation allowed, the recovery of the signal of interest may become also impossible. However, if the attenuation is not too severe, the signal may be recoverable (Paragraph 0031).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have used an erase circuit to compare the number with a

threshold so as to decide whether the data segment can be recovered or removed due to severe saturation.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristocratis Fotakis whose telephone number is (571) 270-1206. The examiner can normally be reached on Monday - Thursday 6:30 - 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aristocratis Fotakis/

Examiner, Art Unit 2611

/Chieh M Fan/

Supervisory Patent Examiner, Art Unit 2611